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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,454	10/27/2003	Gerald H. Engelman	202-1141 (FGT 1851 PA)	2521
28549	7590	09/08/2005	EXAMINER	
KEVIN G. MIERZWA ARTZ & ARTZ, P.C. 28333 TELEGRAPH ROAD, SUITE 250 SOUTHFIELD, MI 48034			STONE, JENNIFER A	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/694,454

Applicant(s)

ENGELMAN ET AL.

Examiner

Jennifer A. Stone

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-20 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☒ Claim(s) 2, 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugimoto et al. (US 6,292,753).

For claim 1, Sugimoto discloses a method of performing threat assessment within a vehicle comprising: detecting at least one object (col 2, Ins 1-7); determining kinematics of the vehicle (col 4, Ins 57-63); determining kinematics of said at least one object (col 4, Ins 57-63); determining a brake threat number in response to said vehicle kinematics and said kinematics of said at least one object (col 6, Ins 38-41); and determining a threat of said at least one object in response to said brake threat number (col 6, Ins 41-48).

For claim 5, Sugimoto discloses determining kinematics of said vehicle and determining kinematics of said at least one object comprise determining yaw rate of the vehicle (col 5, Ins 32-35; Fig. 2, S1).

For claim 6, the method of determining brake threat number comprises: determining a deceleration at zero range value; and determining a maximum vehicle deceleration value (col 8, Ins 25-35 and 46-49).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto et al. (US 6,292,753), and further in view of Igaki et al. (US 2002/0101337).

Sugimoto does not determine a path of a vehicle or an object; however, Stopczynski discloses these features (col 8, lns 1-11). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to determine path prediction to accurately predict the chances of a potential collision.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto et al. (US 6,292,753), and further in view of Igaki et al. (US 2002/0101337).

Sugimoto discloses determining kinematics of said vehicle and determining kinematics of said at least one object comprising determining relative position and velocity of at least one object relative to the vehicle (col 4, lns 57-63). However, Sugimoto does not disclose determining acceleration of at least one object relative to the vehicle. Igaki, on the other hand, does disclose determining acceleration of at least one object relative to the vehicle (parag 0013). It would have been obvious to determine acceleration of an object to accurately determine an instantaneous distance between a vehicle and an object.

***Allowable Subject Matter***

6. Claims 9-20 are allowed.
7. Claims 2, 7, and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Remarks***

8. Applicant's arguments filed August 16, 2005 have been fully considered but they are not persuasive.

The Applicant argues as follows:

Sugimoto does not disclose that a brake threat number is determined in response to vehicle kinematics and kinematics of an object. Furthermore, the brake threshold value is not determined in response to vehicle kinematics and object kinematics, but rather is a predetermined or stored risk value.

Sugimoto does disclose that a brake threat number or braking threshold value is determined in response to vehicle kinematics and kinematics of an object as illustrated in Figure 2, sensors S1-S5. The automatic braking means (M2) is a component that determines the brake threshold value (Figure 2, item U). M2 is not necessarily a constant, stored value. Rather, the value of M2 partially quantifies the braking threshold value and changes depending on the output of the sensors S1-S5 or the vehicle/object kinematics (col 7, lns 16-24; col 8, lns 44-49).

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Stone whose telephone number is (571) 272.2976. The examiner can normally be reached on M-F from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass, can be reached at (571) 272.2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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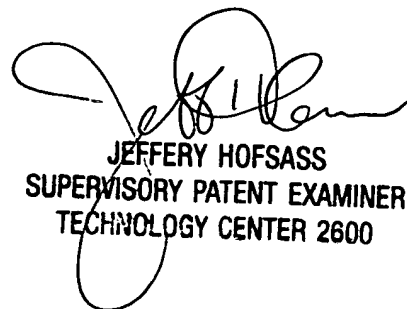
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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Stone

August 31, 2005



JEFFERY HOFSSASS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600